

Commerce

# LOGISTICS AND DISTRIBUTION

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# ABSTRACT

The following paper is presented on the topic of "**logistics** and distribution" which comes under the head of Marketing. Logistics is the process of designing, managing, and improving the movement of products through

the *supply chain. It also* involves planning, implementing, and controlling of the flow of resources between the point of origin and the point of consumption in order to meet some requirements. The resources managed in logistics can include physical items, such as food, materials, equipment, liquids, and staff, as well as abstract items, such as time, information, particles, and energy. The complexity of logistics can be modelled, analyzed, visualized, and optimized by dedicated simulation software. The minimization of the use of resources is a common motivation.

Logistics has the objective of delivering exactly what the customer wants—at the right time, in the right place, and at the right price. In planning for the delivery of goods to customers, marketers have usually looked at a process termed **distribution**, which refers to the activities used to move finished goods from manufacturers to final customers. This process impacts how marketers physically get products where they need to be, when they need to be there, and at the lowest possible cost.

Main functions of Distribution are,

- Order processing
- Warehousing
- Inventory
- Transportation

In logistics and distribution, the focus is on the customer. When planning for the logistics function, firms consider the needs of the customer first. The customer's goals become the logistics provider's goals. With most logistics decisions, firms must compromise between low costs and high customer service. Logistics goal is to provide **Customer Satisfaction**, pre-sorting and pre-tagging of merchandise, order tracking, take back and replace of defective goods. The given thesis emphasizes on how Logistics and Distribution paves a path in Innovative strategy in Management.

# **KEYWORDS**:

## Introduction about Logistics

**Logistics** is the management of the flow of resources between the point of origin and the point of consumption in order to meet some requirements, for example, of customers or corporations. The resources managed in logistics can include physical items, such as food, materials, equipment, liquids, and staff, as well as abstract items, such as time, information, particles, and energy. The logistics of physical items usually involves the integration of information flow, material handling, production, packaging, inventory, transportation, warehousing, and often security. The complexity of logistics can be modelled, analyzed, visualized, and optimized by dedicated simulation software. The minimization of the use of resources is a common motivation.

The term *logistics* comes from the late 19th century: from French *logistique* (loger means *to* lodge).

According to the Council of Logistics Management, logistics includes the integrated planning, control, realization, and monitoring of all internal and network-wide material, part, and product flow, including the necessary information flow, industrial and trading companies along the complete value-added chain (and product life cycle) for the purpose of conforming to customer requirements.

## Different viewpoint of logistics

**Inbounding logistics** is one of the primary processes of logistics, concentrating on purchasing and arranging the inbound movement of materials, parts, and/or finished inventory from suppliers to manufacturing or assembly plants, warehouses, or retail stores.

**Outbound logistics** is the process related to the storage and movement of the final product and the related information flows from the end of the production line to the end user.

Given the services performed by logisticians, the main fields of logistics can be broken down as follows:

- Procurement logistics- consists of activities such as market research, requirements planning, make-or-buy decisions, supplier management, ordering, and order controlling.
- Production logistics- connects procurement to distribution logistics. Its main function is to use available production capacities to produce the products needed in distribution logistics.
- **Distribution logistics** has, as main tasks, the delivery of the finished products to the customer. It consists of order processing, warehousing, and transportation.
- After-sales logistics-support for products sold to customers.
- **Disposal logistics** has as its main function to reduce logistics cost(s) and enhance service(s) related to the disposal of waste produced during the operation of a business.
- **Reverse logistics** denotes all those operations related to the reuse of products and materials.
- **Green logistics** describes all attempts to measure and minimize the ecological impact of logistics activities.
- **Global logistics**-challenges and opportunities presented to various organizations worldwide to achieve global excellence.
- Domestic logistics-round the clock logistics service.
- Concierge Service- assistance to all the customers of a professional.
- RAM logistics (Reliability, Availability and Maintainability)

## Nodes of a distribution network

The nodes of a distribution network include:

- Factories where products are manufactured or assembled
- A **depot or deposit** is a standard type of warehouse thought for storing merchandise (high level of inventory).
- Distribution centers are thought for order processing and order fulfillment(lower level of inventory) and also for receiving returning items from clients.
  - Transit points are built for cross docking activities, which

consist in reassembling cargo units based on deliveries scheduled (only moving merchandise).

 Traditional retail stores such of the Mom and Pop variety or modern supermarkets, hypermarkets, discount stores or groups of consumers with collective buying power.

## Handling and Order Processing

Handling systems include: transpallet handlers, counterweight handler, mast handler, bilateral handlers, trilateral handlers, AGV and stacker handlers.Storage systems include: pile stocking, cell shelfs (either static or movable), cantilever shelf and gravity shelf

Order processing is a sequential process involving: processing withdrawal list, picking (selective removal of items from loading units), sorting (assembling items based on destination), package formation (weighting, labeling and packing), order consolidation (gathering packages into loading units for transportation, control and bill of lading).

# Warehouse management systems and warehouse control systems

Although there is some overlap in functionality, Warehouse Management Systems(WMS) can differ significantly from Warehouse Control Systems (WCS). Simply put, a WMS plans a weekly activity forecast based on such factors as statistics and trends, whereas a WCS acts like a floor supervisor, working in real time to get the job done by the most effective means.

#### Logistics automation

Logistics automation is the application of computer softwareand/or automated machinery to improve the efficiency of logistics operations. Typically this refers to operations within a warehouse or distribution center, with broader tasks undertaken by supply chain managementsystems and enterprise resource planningsystems.

#### Logistics outsourcing

Logistics outsourcing involves a relationship between a company and an LSP (logistic service provider), which, compared with basic logistics services, has more customized offerings, encompasses a broad number of service activities, is characterized by a long-term orientation, and thus has a strategic nature.

Outsourcing does not have to be complete externalization to a LSP, but can also be partial:

- A single contract for supplying a specific service on occasion
- Creation of a spin-off
- Creation of a joint venture

It also includes the 3LP(Third Party Logistics) and 4LP(Fourth Party Logistics).

#### **Emergency logistics**

Emergency logistics is a term used by the logistics, supply chain, and manufacturing industries to denote specific time-critical modes of transport used to move goods or objects rapidly in the event of an emergency. The reason for enlisting emergency logistics services could be a production delay or anticipated production delay, or an urgent need for specialized equipment.

#### Introduction about Distribution

Distribution is the process of making a product or service available for use or consumption by a consumer or business user, using direct means, or using indirect means with intermediaries.

Distribution is very important for a company if a customer orders a product; he wants to get it in time. Otherwise he will go to another company. The distribution policy of a company has the following target:

"Getting the right goods to the right places at the right time for the least costs!"

#### The Importance of Distribution

Most producers use intermediaries to bring their products to market. They try to develop a **distribution channel** (**marketing channel**) to do this. A **distribution channel** is a set of interdependent organizations that help make a product available for use or consumption by the consumer or business user. **Channel intermediaries** are firms or individuals such as wholesalers, agents, brokers, or retailers who help move a product from the producer to the consumer or business user.

A company's channel decisions directly affect every other marketing decision. Place decisions, for example, affect pricing. Marketers that distribute products through mass merchandisers such as Wal-Mart will have different pricing objectives and strategies than will those that sell to specialty stores. Distribution decisions can sometimes give a product a distinct position in the market. The choice of retailers and other intermediaries is strongly tied to the product itself. Manufacturers select mass merchandisers to sell mid-price-range products while they distribute top-of-theline products through high-end department and specialty stores. The firm's sales force and communications decisions depend on how much persuasion, training, motivation, and support its channel partners need. Whether a company develops or acquires certain new products may depend on how well those products fit the capabilities of its channel members.

Some companies pay too little attention to their distribution channels. Others, such as FedEx, Dell Computer, and Charles Schwab have used imaginative distribution systems to gain a competitive advantage.

#### **Functions of Distribution Channel**

Distribution channels perform a number of functions that make possible the flow of goods from the producer to the customer. These functions must be handled by someone in the channel. Though the type of organization that performs the different functions can vary from channel to channel, the functions themselves cannot be eliminated. Channels provide time, place, and ownership utility. They make products available when, where, and in the sizes and quantities that customers want. Distribution channels provide a number of logistics or physical distribution functions that increase the efficiency of the flow of goods from producer to customer. Distribution channels create efficiencies by reducing the number of transactions necessary for goods to flow from many different manufacturers to large numbers of customers. This occurs in two ways. The first is called **breaking bulk**. Wholesalers and retailers purchase large quantities of goods from manufacturers but sell only one or a few at a time to many different customers.

Second, channel intermediaries reduce the number of transactions by **creating assortments**—providing a variety of products in one location—so that customers can conveniently buy many different items from one seller at one time. Channels are efficient. The *transportation and storage of goods* is another type of physical distribution function. Retailers and other channel members move the goods from the production site to other locations where they are held until they are wanted by customers. Channel intermediaries also perform a number of **facilitating functions**, functions that make the purchase process easier for customers and manufacturers. Intermediaries often provide *customer services* such as offering credit to buyers and accepting customer returns. Customer services are oftentimes more important in B2B markets in which customers purchase larger quantities of higher-priced products.

Some wholesalers and retailers assist the manufacturer by providing *repair and maintenance service* for products they handle. Channel members also perform a *risk-taking* function. If a retailer buys a product from a manufacturer and it doesn't sell, it is "stuck" with the item and will lose money. Last, channel members perform a variety of *communication* and *transaction* functions. Wholesalers buy products to make them available for retailers and sell products to other channel members. Retailers handle transactions with final

#### VOLUME-7, ISSUE-12, DECEMBER-2018 • PRINT ISSN No 2277 - 8160

consumers. Channel members can provide two-way communication for manufacturers. They may supply the sales force, advertising, and other marketing communications necessary to inform consumers and persuade them to buy. And the channel members can be invaluable sources of information on consumer complaints, changing tastes, and new competitors in the market.

#### The Internet in the Distribution Channel

By using the Internet, even small firms with limited resources can enjoy some of the same competitive advantages as their largest competitors in making their products available to customers internationally at low cost. E-commerce can result in radical changes in distribution strategies. Today most goods are massproduced, and in most cases end users do not obtain products directly from manufacturers. With the Internet, however, the need for intermediaries and much of what has been assumed about the need and benefits of channels will change. In the future, channel intermediaries that physically handle the product may become largely obsolete. Many traditional intermediaries are already being eliminated as companies question the value added by layers in the distribution channel. This removal of intermediaries is termed disintermediation, the elimination of some layers of the distribution channel in order to cut costs and improve the efficiency of the channel.

#### **Types of Distribution Channels**

Consumer Channels Business-to-Business Channels Channels for Services

#### Inventory

Inventory management (ordering and carrying cost)

- Ordering cost-total of expenses incurred in placing an order
- Carrying cost-total cost of holding inventory

Just In Time Inventory-strategy companies employ to increase efficiency and decrease the wastes by receiving goods as and when they are needed, thereby reducing inventory costs.

#### Transportation

Transportation takes place through,

- Rail
- Truck
- Airways
- Seaways
- Ships
- Pipeline

## **Elements of distribution**

Distribution has two elements, the institutional and the physical. Whilst the modes of market entry were fully discussed in chapter seven, the actual institutions (for example retailers, agents and so on.) were not. These will be discussed briefly. Physical distribution aspects cover transport and warehousing, and again, these will be briefly touched on.

Whilst most agricultural exports from developing countries are either in a "primary" format (for example cotton, maize) or "finished" format (for example flowers, vegetables) increasing attention is being put on "processed" or "added value" formats. This means that, whereas in the former, exporters are in the hands of agents, merchants or other middlemen, in the latter much more needs to be understood of the channel itself. The more is known about the end user and the channel to reach him/her the better equipped will be the exporter to understand and meet the needs and also to perhaps gain more of the exported added value. It is a fact in flowers, for example, that these are sold on from the Dutch market to the Far East, where the price commanded is much more than the original exporter price. If the original exporter could participate in this channel, the greater would be the return.

The longer the channel, the more likely that producer profits will be

indirectly reduced. This is because the end product's price may be too expensive to sell in volume, sufficient for the producer to cover costs. Yet cutting channel length may be impossible, as country infrastructure requirements may dictate they being there.

#### CONCLUSION

Uncertainty is certain. So are increased complexity, competition and compliance. Third-party logistics (3PL), port-based logistics, and specialized services are on the rise. With the new normal forcing logistics service providers (LSPs) to focus on their business models, today's imperatives are filling service gaps, cutting carbons, and organic growth.

Future success, however, begins with strategies and services that resonate the needs and demands of tomorrow's global enterprises. Keeping businesses in motion will require mastering the verticals served, becoming the customer's brand custodian, and sharing risk.

Logistics and Distribution blends expertise in consulting, technology, and sourcing to help clients solve complex business challenges and unlock value levers by creating outcomes in three key areas: business transformation, accelerating innovation, and efficient operations.

Thus LOGISTICS and DISTRIBUTION proves to be an innovative strategy in Management!!!